

IN THE CLAIMS:

Please amend claims 1-9, 15, 16, 21, and 26-29 as follows.

1. (Currently Amended) ~~A method for ensuring confidentiality of signal transmission in a point-to-multipoint data transmission network, wherein the network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the method comprising:~~

transmitting an upstream signal from a first station;

reflecting said upstream signal by at least ~~one~~ two ~~disturbing reflector~~ reflectors ~~for producing to produce~~ a disturbing reflection; and

combining said disturbing reflection with a second reflection of said upstream signal to render said second reflection undecodable by a second station to ensure confidentiality of signal transmission in a point-to-multipoint data transmission network, wherein said point-to-multipoint data transmission network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium.

2. (Currently Amended) The method according to claim 1, wherein, in the combining ~~step of said disturbing reflection~~, said second reflection comprises an unwanted reflection.

3. (Currently Amended) The method according to claim 1, wherein the transmitting ~~step of said upstream signal~~ comprises using a transmission medium that comprises an optical fiber.

4. (Currently Amended) The method according to claim 3, wherein, in the transmitting ~~step of~~ said upstream signal, said data transmission network comprises an Ethernet passive optical network and said first station comprises an optical network unit.

5. (Currently Amended) The method according to claim 3, wherein, in the reflecting ~~step of~~ said upstream signal, said at least one disturbing reflector comprises at least one discrete reflector.

6. (Currently Amended) The method according to claim 3, wherein, in the reflecting ~~step of~~ said upstream signal, said at least one disturbing reflector comprises a long continuous reflector.

7. (Currently Amended) The method according to claim 3, wherein, in the reflecting ~~step of~~ said upstream signal, said at least one disturbing reflector is located in a redundant branch of an optical splitter.

8. (Currently Amended) ~~A system for ensuring confidentiality of signal transmission in a point-to-multipoint data transmission network, wherein the network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the system further comprising:~~

~~at least one two~~ disturbing reflector-reflectors placed upstream of a first station and a possible point of eavesdropping in a point-to-multipoint data transmission network ~~said transmission network for configured to produce~~ producing a disturbing reflection of a signal transmitted by said first station to ensure confidentiality of signal transmission in said point-to-multipoint data transmission network, ~~said disturbing reflection to make said~~ disturbing reflection to ~~combining combine~~ with a second reflection of said signal, wherein said point-to-multipoint data transmission network comprises at least one hub, at

least one transmission medium and at least one station connected to said hub via said at least one transmission medium.

9. (Currently Amended) The system according to claim 8, wherein the at least one disturbing reflector ~~produces~~ is configured to produce the disturbing reflection ~~combining~~ combined with the second reflection, wherein said second reflection comprises an unwanted reflection.

10. (Original) The system according to claim 8, wherein said at least one disturbing reflector is placed upstream of the possible point of eavesdropping in said transmission network comprising at least one transmission medium, and wherein said transmission medium comprises an optical fiber.

11. (Original) The system according to claim 10, wherein said at least one disturbing reflector is placed upstream of the possible point of eavesdropping in said transmission network comprising at least one transmission medium, and wherein said data transmission network comprises an Ethernet passive optical network and said station comprises an optical network unit.

12. (Original) The system according to claim 10, wherein said at least one disturbing reflector comprises at least one discrete reflector.

13. (Original) The system according to claim 10, wherein said at least one disturbing reflector comprises a long continuous reflector.

14. (Original) The system according to claim 10, wherein said at least one disturbing reflector is located in a redundant branch of an optical splitter.

15. (Currently Amended) A network, comprising:
at least one hub;
-at least one transmission medium; and
at least one station connected to said hub via said at least one transmission medium;~~the network further comprising; and~~
at least ~~one~~two disturbing reflector~~reflector~~s placed upstream of a first station and a possible point of eavesdropping in said transmission network ~~for producing~~configured to produce a disturbing reflection of a signal transmitted by said first station and to make said disturbing reflection to combine~~combining~~ with a second reflection of said signal.

16. (Currently Amended) The network according to claim 15, wherein said at least one disturbing reflector ~~combines~~is combined with said second reflection, and wherein said second reflection comprises an unwanted reflection.

17. (Original) The network according to claim 15, wherein said at least one disturbing reflector is placed upstream of said first station and said possible point of eavesdropping in said transmission network, and wherein said transmission network comprises a transmission medium comprising an optical fiber.

18. (Original) The network according to claim 17, wherein said at least one disturbing reflector comprises at least one discrete reflector.

19. (Original) The network according to claim 17, wherein said at least one disturbing reflector comprises a long continuous reflector.

20. (Original) The network according to claim 17, wherein said at least one disturbing reflector is located in a redundant branch of an optical splitter.

21. (Currently Amended) A transmission apparatus, comprising:
at least one optical splitter; ~~and~~
at least one connector for an optical network unit, ~~the transmission apparatus~~
~~further comprising; and~~
at least ~~one~~two disturbing reflector placed upstream of a first station and a
possible point of eavesdropping in said transmission network ~~for producing~~configured to
produce a disturbing reflection of a signal transmitted by said first station and to make,
said disturbing reflection to combine ~~combining~~ with a second reflection of said signal.

22. (Original) The transmission apparatus according to claim 21, wherein said at
least one disturbing reflector produces said disturbing reflection combining with said
second reflection, wherein said second reflection comprises an unwanted reflection.

23. (Original) The transmission apparatus according to claim 22, wherein said
disturbing reflector comprises at least one discrete reflector.

24. (Original) The transmission apparatus according to claim 22, wherein said
disturbing reflector comprises a long continuous reflector.

25. (Original) The transmission apparatus according to claim 22, wherein said
disturbing reflector is located in a redundant branch of an optical splitter.

26. (Currently Amended) A point-to-multipoint data transmission network,
~~wherein the network comprises~~ comprising:
at least one hub; ₂
at least one transmission medium; ~~and~~

at least one station connected to said hub via said at least one transmission medium,~~the network further comprising;~~

transmission means for transmitting an upstream signal from a first station;

reflection means for reflecting said upstream signal by at least ~~one~~two disturbing reflector~~reflection means~~ for producing a disturbing reflection; and

combination means for combining said disturbing reflection with a second reflection of said upstream signal to render said second reflection undecodable by a second station.

27. (Currently Amended) ~~A system for ensuring confidentiality of signal transmission in a point-to-multipoint data transmission network, wherein the network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the system further comprising:~~

at least ~~one~~two disturbing reflection means, placed upstream of a first station and a possible point of eavesdropping in ~~said transmission network~~a point-to-multipoint data transmission network, for producing a disturbing reflection of a signal transmitted by said first station for ensuring confidentiality of signal transmission in a point-to-multipoint data transmission network, said disturbing reflection ~~combining~~is combined with a second reflection of said signal, wherein the point-to-multipoint data transmission network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium.

28. (Currently Amended) A network₁ comprising:

at least one hub₁;

at least one transmission medium₁; ~~and~~

at least one station connected to said hub via said at least one transmission medium,~~the network further comprising;~~ and

at least ~~one~~two disturbing reflection means, placed upstream of a first station and a possible point of eavesdropping in said transmission network. for producing a disturbing reflection of a signal transmitted by said first station, said disturbing reflection ~~combining~~is combined with a second reflection of said signal.

29. (Currently Amended) A transmission apparatus, comprising:

at least one optical splitter; ~~and~~

at least one connector for an optical network unit, ~~the transmission apparatus further comprising;~~ and

at least one disturbing reflection means, placed upstream of a first station and a possible point of eavesdropping in said transmission network, for producing a disturbing reflection of a signal transmitted by said first station, said disturbing reflection ~~combining~~is combined with a second reflection of said signal.